



ENVIRONMENTAL JUSTICE:

Strengthening the Bridge
Between Economic Development
and Sustainable Communities

Proceedings Document

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2A: Issues Concerning Environmental Health and Risk Assessment

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Overview

Risk assessment has been used to inform our environmental decisions for decades. Beginning with the National Environmental Policy Act, risk assessment has been an explicit part of environmental regulations for nearly 30 years. This process provides an organized method for looking at our environment and evaluating the possible consequences of a given action or inaction. Risk assessment gives us information about potential environmental harm in order that we may take measures to protect ourselves and our environment. This scientific assessment of health and ecological risk, as well as other impacts ranging from sociocultural to economic effects, has led to a cleaner and safer environment with greater public involvement than would have been imagined a few decades ago. As we move into the next century, in an era of rapid development and economic growth, it is our goal to maintain a healthy environment and achieve full, fair community involvement in the decision-making process.

Generally, risk assessment follows four steps. The first is a description of the hazard of concern. Second, is an appraisal of whether someone or some resource could be exposed to or affected by the hazard. Third, is a review of available scientific information about responses to the hazard, eg. laboratory toxicity studies. It is important to learn from what has occurred in similar situations. In the fourth step, the information from the second and third are combined. To estimate what the effect could be if a person or resource were exposed to the hazard.

The human environment is complex and includes interrelationships among (1) physical resources such as air, water, and soil; (2) biological resources ranging from watersheds and ecosystems to individual species, and (3) sociocultural resources such as land use, aesthetics, and spiritual values or quality of life. Consequently, the process of making a decision is complicated. When evaluating the use of risk assessment as a tool for organizing information about the possible environmental effect of our actions, it is important to distinguish between the assessment tool and the decision that is made. For example, a baseball bat can be used to smack a home run or to smash a car window. It is the use of the tool, not the tool itself, that determines the appropriateness of the

outcome. It is the responsibility of the person or group who uses risk assessment information to make a decision to ensure the appropriateness of that decision. Different people, with differing perspectives, may take the same risk assessment results and choose different solutions. Highway safety is a good example. Having the same information from an assessment of the risk associated with wearing seat belts or not, activating air bags or not, or wearing helmets or not, people will make different risk-based decisions.

In the environmental arena, where risk decisions can affect communities rather than individuals, making the best decision is even more complex. This is especially true given the variety of risk assessments that can feed a single decision. Often, one group may feel that a given assessment has been weighted inappropriately (for example, economic impact may be weighted greater than health or ecological impact) leading to what they consider a skewed decision. In these cases risk assessment as a tool may be inappropriately blamed for the disagreement rather than the perspectives or judgments that were used in making the decision. A role for environmental justice is to focus on disparities in the environmental decision making process in an effort to improve the fairness of that process. New factories and landfills will continue to be developed. Decisions about where to locate them and how to ensure that these facilities operate in ways that minimize risks to both workers and communities will be made. In these events it is essential that the affected communities be involved in the risk assessment process that guides the decision.

No matter what term we choose to use, from risk assessment to dialogue on impacts, the process of evaluating the effect of our actions on ourselves and our environment will continue to be the foundation for long-lasting and effective decisions and policies. Strong decisions are based on sound information and good judgment rather than reflexive, emotional responses. The more we work together to provide input into these decisions, the better our decisions will be.

The aim of this session is to focus on positive recommendations for creating an organized and consistent framework within which we can assess and compare risk information and to recommend ways for bringing this framework to the decision-making process. From the extensive dialogue that has already occurred, we know the issues. The purpose of this program is not to dwell on problems of the past, rather to come together and share our insight and suggestions for positive steps forward.

Recommendations

In order to ensure and develop an equitable risk assessment process it is recommended that we strive to:

- ⇒ Encourage and provide a means for ongoing dialogue among stakeholders. It is important for citizens to explore a variety of community involvement models that aim to achieve healthy, sustainable, and inclusive communities.
- ⇒ Ensure that the community has an opportunity to participate in all risk assessments conducted for local facilities. Risk assessment training can be an effective means of supporting the community's involvement. We should work to ensure that the community is included as equals, and that lay language is used in discussing health and risk information.
- ⇒ Develop programs and provide resources to build capacity in communities, to enhance access to health-related information and participation in the assessment process. This includes providing funds and creating partnerships for technical assistance, working through schools and community organiza-

tions, as well as unions (for workplace assessments).

- ⇒ Provide access to community-based occupational and environmental health programs, to address health needs from diagnosis and treatment to education and prevention.
- ⇒ Support the scientific research needed to improve our ability to conduct integrated evaluations of different types of risks and cumulative effects. For health risks, this includes studies that consider different exposure levels and durations and non-cancer effects, including synergistic effects of multiple chemicals. Also important are exposure measurement studies, such as biomarker research, which will enable community members to determine if exposures have occurred. Work to fund scientists from minority institutions for this research.
- ⇒ Improve collaboration among federal agencies (including oversight agencies), improve relationships between these agencies and communities, and increase attention to environmental health issues at the federal, state, and local levels.
- ⇒ Improve environmental regulations aimed at reducing industry emissions and encourage alternative technologies and processes that minimize waste generation, including through economic incentives.